

SHALLOW TO GRAVEL RANGE SITE

1. TOPOGRAPHY

- a. This site occurs on nearly level to gently sloping outwash plains and stream terraces. Slopes are commonly from one to six percent.

2. SOILS

- a. These are shallow, moderately fine to moderately coarse textured soils overlying sand and gravel at about 20 inches. They are somewhat excessively drained. Permeability is moderate to moderately rapid and available water capacity is low.

- b. Soil taxonomic units common to this site are:

Arvilla sandy loam and fine sandy loam
Brantford loam and clay loam
Renshaw loam and gravelly loam

Refer to Section II-A for a complete list of soil taxonomic units and range sites.

3. POTENTIAL VEGETATION

- a. Cool-season midgrasses dominate the general appearance of this site. Principal plants are needleandthread, western wheatgrass, green needlegrass, and blue grama. Other species are bearded wheatgrass, plains muhly, prairie junegrass, red threeawn, porcupinegrass, Kentucky bluegrass, and upland sedges. Forb species make up about 10 percent of the total herbage production. Shrub species occur in small amounts on the site.
- b. Continued heavy grazing by cattle results in a decrease of western wheatgrass, green needlegrass, bearded wheatgrass, plains muhly, and porcupinegrass. Needleandthread initially increases and then decreases under this grazing regime. Species that increase are blue grama, red threeawn, Kentucky bluegrass, upland sedges, and fringed sagebrush.

Further deterioration of the site results in a dominance of blue grama, Kentucky bluegrass, upland sedges, fringed sagebrush, and undesirable forbs.

2--Shallow to Gravel Range Site

- c. Approximate total annual production of this site in excellent condition is from 1600 to 2100 pounds of air-dry herbage per acre, depending on growing conditions.
- d. A detailed description of the vegetation in excellent condition is as follows:

Relative Percent Composition of the Potential Vegetation

| | <u>Mean Productivity</u> | |
|-------------------------------|--------------------------|---------------|
| | lbs/acre | % composition |
| Grasses | | |
| Needleandthread | 462 | 25 |
| Western wheatgrass | 370 | 20 |
| Green needlegrass | 185 | 10 |
| Blue grama | 185 | 10 |
| Bearded wheatgrass | 93 | 5 |
| Prairie junegrass | | |
| Plains muhly | | |
| Red threeawn | 93 | 5 |
| Porcupinegrass | | |
| Kentucky bluegrass | | |
| Other grasses | | |
| Grasslikes | | |
| Penn sedge | | |
| Threadleaf sedge | 185 | 10 |
| Other sedges | | |
| Forbs | | |
| Rush skeletonplant | | |
| Scarlet globemallow | | |
| Dotted gayfeather | 185 | 10 |
| Woolly goldenrod | | |
| Hoods phlox | | |
| Other forbs | | |
| Shrubs and half-shrubs | | |
| Fringed sagebrush | | |
| Prairie rose | 92 | 5 |
| Western snowberry | | |
| Other shrubs | | |
| Total | 1850 | 100 |

3--Shallow to Gravel Range Site

4. DOMESTIC LIVESTOCK GRAZING VALUE

- a. This site is suited for both cattle and sheep grazing. The best season of grazing is summer; however, the site also has spring and fall grazing value. Range sites grazed during the spring need a periodic rest to improve and maintain plant composition.

5. WILDLIFE NATIVE TO THE SITE

- a. This site is used by antelope and white-tailed deer for forage. Small mammals commonly found are red fox, jackrabbit, and Richardson's ground squirrel. Upland birds such as the sharp-tailed grouse, mourning dove, and meadowlark use this site. Songbirds found on this site are the eastern kingbird, horned lark, and lark bunting.

6. ESTHETIC AND RELATED VALUES

- a. This site is part of the upland prairies and gives one the enjoyment of open space. A variety of flowering plants bloom during spring and summer. Recreational uses are hunting and hiking.

7. HYDROLOGIC CHARACTERISTICS

- a. Runoff is slow on good to excellent condition, properly grazed range. Rate of water transmission is moderate in the soil profile.

8. A TYPICAL SITE LOCATION IN THIS AREA IS AS FOLLOWS

